EVIDENCE-BASED CASE REVIEW

Identifying and treating adolescent depression

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Objectives

Understand the importance of diagnosing and treating depression in adolescents

Identify the symptoms of depression in adolescents and the difference between depression and normal adolescent moods

Identify suicidal risk in a depressed adolescent

Understand when a specialty consultation is needed

Understand what effective treatments are available

By age 18, about 20% of our nation's youth will have had depressive episodes,[1,2] with girls at substantially higher risk.[2] Major depressive episodes in adolescence last an average of 6 to 9 months,[2,3] 6% to 10% of depressed adolescents have protracted episodes, and the probability of recurrence within 5 years is about 70%.[3] Given that depressed people are as likely to seek help in primary care settings as in mental health establishments,[4] primary care physicians may be the first to be aware of this problem in their adolescent patients.

Case history

Wanda S, aged 16 years, comes for her checkup accompanied by her mother. She is in good health and has had no notable illnesses in the past year. However, Wanda complains of difficulty sleeping in the past few months and of frequently being tired. Her mother asks for a few minutes alone to discuss her concerns about her daughter. She states that "Wanda has been much more irritable than her usual self" and that "her teachers have been complaining that she doesn't seem to attend to her work lately and her grades are slipping." Wanda's mother remembers being an unhappy adolescent herself and asks your advice on how to help her daughter.

When directly questioned, Wanda admits to "feeling pretty bad for the last few months, since school began." She concedes that she feels sad and blue most days of the week and believes that she is "a loser." She's been spending more time alone and, despite complaining of chronic boredom, has little energy or desire to engage in recreational activities.

METHODS

Our conclusions are based on literature searches using both MEDLINE and PsychLIT databases, and most are derived from empiric findings and clinical trials. Because of the relatively modest literature, particularly on treatment, some suggestions are based on published opinions of experts. We have noted when expert opinion is our source.

What does depression look like in adolescents?

According to the *Diagnostic and statistical manual of mental disorders,* fourth edition,[5] an adolescent must have five out of nine characteristic symptoms most of the time for at least 2 weeks for a diagnosis of major depressive disorder. At least one of these symptoms must be either depressed or irritable mood or a pervasive loss of pleasure or interest in events that were once enjoyed. Many seriously depressed adolescents experience both. For example, a depressed adolescent may feel sad most of the day, act crabby, stop hanging out with friends, and seem to lose her love of soccer.

Although all adolescents occasionally become sad, and adolescent angst may be normal and common, symptoms

Summary points

- Adolescent depression is common, and primary care physicians are often in a position to first identify the symptoms
- Depression includes changes in moods, thoughts, behaviors, and physical functioning. Among adolescents, depression may include irritable as well as sad moods
- Unlike normal adolescent moods, depression is severe and enduring and interrupts the adolescent's ability to perform in school, to relate to peers, and to engage in age-appropriate activities
- In assessing the risk of suicide, ask straightforward questions about the adolescent's intent, plan, and means
- Antidepressant medication and psychotherapy may be effective treatments; a combination of these is frequently optimal
- Education about depression with both the adolescent and parents provides a rationale for treatment, may alleviate family misunderstandings, and facilitates recovery

of major depression are more severe in intensity, interfere with social, academic, and recreational activities, and last for months at a time,[2] instead of fluctuating like more typical adolescent ups and downs.[6] Depression occurs as a cluster of signs and symptoms, including emotional, physical, and mental changes that usually signify an alteration from the adolescent's normal personality.[3]

Some adolescents present with depressive symptoms but do not meet the full criteria for having major depression. Dysthymic disorder is characterized by milder but more persistent symptoms than major depression. In dysthymic disorder, symptoms are present much of the time for at least one year in adolescents (2 years in adults).

Wanda's physician prescribes a low dose of fluoxetine hydrochloride (Prozac), a selective serotonin reuptake inhibitor. In addition, the physician refers Wanda for interpersonal therapy to help her cope with the losses and disappointments of the past year, develop new peer relationships, and reintegrate herself into high school activities.

This multifaceted approach will address the physical and psychological symptoms Wanda has been experiencing and provide her with skills she can use to combat future depressive symptoms and interpersonal problems.

What contributes to adolescent depression?

The vulnerability-stress model is useful for understanding depression. According to this model, adolescent depression results from a predisposition for depression, which is then triggered or complicated by environmental stress. The exact nature of the predisposition may include biologic and cognitive factors. This interplay between life's stresses and cognitive and biologic vulnerabilities is important in conceptualizing depression in an adolescent.

An accumulation of adverse life circumstances and events can trigger depression. Family adversity,[7] academic difficulties,[3] chronic medical conditions,[8] and loss in the adolescent's life may increase risk. As Wanda's history illustrates, losses such as her breakup with a boyfriend and failure to make the track team may serve as triggers. Illnesses such as asthma, sickle cell anemia, irritable bowel syndrome, recurrent abdominal pain, and diabetes mellitus may put an adolescent at particular risk.[8]

Cognitive models of depression suggest that it is not stressful events and circumstances but rather the tendency toward negative interpretations about these situations that initiates and maintains depression.[9,10] When an adverse event occurs, the depressed adolescent often understands the cause of the event as something stable, internal, and global. For example, Wanda fails to make the track team and attributes this failure to being a "loser." This cause is stable (unlikely to change), internal (her own fault), and global (affecting everything she does).

Vulnerability to depression may result from biologic or genetic factors and lead to numerous biologic changes. First, studies of family history show that offspring of depressed parents are at high risk for depression[11] and that depressed adolescents have high rates of depression among their family members.[12] Wanda's mother may have been depressed during adolescence. Second, as depressions become more severe, biologic changes may occur, including dysregulation of growth hormone and changes in sleep architecture.[6]

How do you assess adolescent depression?

The diagnosis of depression is made clinically. Physicians need to ask about changes in an adolescent's moods, feelings, and thoughts; behaviors; daily functioning; and any impairment in that functioning, as well as physical symptoms. Furthermore, a medical explanation (for example, thyroid disease or adrenal dysfunction) or substance misuse needs to be ruled out as possible causes. The best methods of assessment supplement the adolescent's self-report with reports from parents or guardians and other outside sources.[2] Whereas youths tend to be better reporters of their internal experiences, such as their mood and thoughts, parents tend to be better reporters of overt be-

Symptoms of major depressive disorder in adolescents

- Depressed or irritable mood
- Loss of pleasure or interest in activities that were once enjoyed
- Significant weight loss or gain when not dieting, or an increase or decrease in appetite
- Insomnia or hypersomnia
- Observable slowing of movements and speech or increased agitation
- Fatigue
- Feelings of worthlessness or excessive and/or inappropriate guilt
- Difficulty concentrating and/or making decisions
- Recurrent thoughts of death or suicide or a suicide attempt

For a diagnosis, an adolescent must have at least 5 symptoms, which must include at least one of either of the first 2 symptoms, for at least 2 weeks.

haviors, such as disruptive behavior in the classroom and defiance.[13] As in all primary care evaluations, ethnic and cultural factors must also be considered. For example, in some cultures, making eye contact with an authority figure may not be considered proper etiquette, and the failure to do so may not reflect a depressed mood.[3] In recent years, several screening tools for depression have been adapted for use in primary care settings.[14,15] The use of these screening techniques can improve the quality of assessments of depression while reducing the time needed for questioning during routine examinations.

When assessing adolescents for depression who already have chronic illnesses, it is important to look at the symptoms that are less likely to overlap with the physical illness, such as feelings of guilt, worthlessness, and hopelessness. It may be difficult to decipher whether changes in sleep patterns, appetite, and increased fatigue are due to the illness or to depression.[3]

How do you assess and intervene when an adolescent is suicidal?

Depression is associated with a markedly increased risk of suicide and attempted suicide.[16-18] About 41% of depressed youths have suicidal ideation, and 21% report a past attempt at suicide.[2] Although many people are concerned that asking directly about suicide may suggest the idea, most depressed youths have suicidal thoughts and are relieved at the opportunity to share them. Unfortunately, adolescents may not volunteer this information unless directly questioned. Often depressed youths have thoughts of death, a desire to die, or a more overt suicidal intention. Asking straightforward, unambiguous questions to assess the risk of suicide is the best strategy. Questions may include "Have you thought that life was not worth living?" "Have you wished you were dead?" "Have you thought about killing yourself?" "What have you thought about doing?" "Have you ever tried to hurt yourself?" or "Have you ever actually tried to kill yourself?" If there is evidence of suicidal thoughts or attempts, it is then critical to establish if the adolescent has the intent, plan, and means to attempt suicide. Questions to ask may include "Are you going to try?" "How would you do it?" and "Do you have a gun (knife, pills)?"

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Symptoms of dysthymic disorder in adolescents

Depressed or irritable mood must be present for most of the day, more days than not, for at least 1 year. In addition, 2 of the following 6 symptoms must be present:

- Poor appetite or overeating
- Insomnia or hypersomnia
- Low energy or fatigue
- Low self-esteem
- Poor concentration or difficulty making decisions
- Feelings of hopelessness

During this time, the adolescent has never been without the depressive symptoms for more than 2 months at a time but does not meet criteria for a major depressive episode.

Having assessed thoughts of death, the intention to die, plans for an attempt, the means to commit suicide, and the availability of support, the physician must estimate the degree of risk and make choices for managing the patient's risk of suicide.[3] First, although thoughts of death or thinking of suicide in vague terms suggests a low risk, such symptoms indicate a need for both immediate intervention and close monitoring (because suicidal risk can increase). Second, when the adolescent acknowledges having a plan or means but no intent, emergency care may not be needed if safety can be ensured through involving parents and other support systems. Parents need to be in close proximity and to remove potential means such as firearms, and the adolescent needs to be referred for psychotherapy. However, if the adolescent does not have a supportive family, has access to lethal means, or has other risk factors (for example, a past suicide attempt, family history of suicide, recent exposure to suicide, substance abuse, bipolar illness, mixed state, or severe stress), more intensive interventions are needed, and the adolescent needs to see a mental health specialist. Finally, when the adolescent has intent, plan, and means, the risk for suicide is high. Such adolescents need help immediately, and psychiatric emergency care may be needed.[3] Regardless of risk, follow-up care is essential to tackle the concerns that contributed to the adolescent's suicidal feelings.

When is a specialty consultation needed?

Depression in adolescents is frequently complicated by other mental health and life problems. Because these ad-

Empirically supported treatment options

Selective serotonin reuptake inhibitors Alters dysfunctional neurotransmitter systems

Cognitive behavioral therapy Monitors and changes dysfunctional ways of thinking

Interpersonal therapy Improves interpersonal skills and problem-solving abilities

ditional problems affect management strategies, it is important to screen for comorbid disorders and problems with psychosocial functioning and life stress. If at any point the primary care physician feels uncertain about the diagnosis and/or management strategy, specialty mental health consultation is recommended. Primary care physicians should obtain a consultation with a specialist if any of the following are present: current or past mania, two previous episodes of depression, chronic depression, substance dependence or abuse, eating disorder, a history of being admitted to a hospital for psychiatric problems, or a history of suicide attempts or concerns regarding the risk for suicide.

TREATMENTS EFFECTIVE FOR ADOLESCENT DEPRESSION

Although research on the treatment of adolescent depression is limited, recent clinical trials have identified promising interventions, both pharmacologic and psychotherapeutic. The physician also needs to help the family to understand the adolescent's symptoms.

Although research has clearly documented the use of antidepressant medication for adults with depression,[19] far fewer studies have examined the use of these agents in adolescents. Selective serotonin reuptake inhibitors are the first choice in medication for depressed adolescents because of their relatively benign side effects, their safety in overdose, and because they only need to be taken once daily.[3] Both tricyclic antidepressants and monoamine oxidase inhibitors are less efficacious in adolescents, are more lethal in overdose,[20] and are not recommended at this time.[3]

Cognitive behavior therapies are effective in treating adolescent depression.[21,22] They assume that developing more adaptive ways of thinking, understanding events, and interacting with the environment will reduce depressive symptoms and improve a youth's ability to function. The cognitive component of the treatment focuses on helping adolescents identify and interrupt negative or pessimistic thoughts, assumptions, beliefs, and interpretations of events and to develop new, more positive or optimistic ways of thinking. The behavioral component focuses on increasing constructive interactions with others to improve the likelihood of receiving positive feedback.

Interpersonal therapy emphasizes improving relationships. The therapy is brief and focuses on the problems that precipitated the current depressive episode. It helps the adolescent to reduce and cope with stress. Two studies[23,24] have shown its effectiveness in reducing depression.

No definitive guidelines have been published for deciding when to begin with medication, psychotherapy, or a combination of medication plus psychotherapy. We have, however, suggested several considerations based on common sense to help clinicians make this decision.[25-27] For example, medication should be considered if an adolescent does not seem interested in thinking about problems, has limited cognitive abilities, is severely depressed with vegetative symptoms, has had two or more episodes of depression, has not responded to 8 to 12 weeks of psychotherapy, or cannot regularly get to therapy sessions. Conversely, psychotherapy should be considered as the first alternative for adolescents who fear medication or do not like taking pills, prefer talking about problems, have complex life stressors that need sorting out, have contraindications to medication (such as pregnancy or breastfeeding), or have not responded to an adequate trial of medication. For some adolescents who have combinations of severe depression, limited cognitive skills, and complex life stressors, it may be best to begin with both medication and psychotherapy.

Parents may have little understanding of the adolescent's symptoms and sometimes interpret falling grades and lack of interest as willful behavior. By giving parents information about the symptoms, causes, and treatments of depression, the physician can help them to help their child to recover, to monitor symptoms, and to facilitate ongoing care.[3] Families differ in their willingness to consider the possibility that their child may have a psychological or psychiatric problem. For personal and/or cultural reasons, some families may be more receptive to a medical model, which identifies the depressive symptoms as part of an illness, and so they are more comfortable with a pharmacologic intervention. Other families may find a cognitive explanation more acceptable and see psychotherapy as a more palatable option. Further, primary care physicians may note that on finding out about their adolescent's depression, parents may feel guilty or feel they are being blamed and thus be resistant to suggestions for interventions. Appropriate education about depression and possible causes may help allay these concerns.

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A BOOK TO MAKE YOU THINK

Framing Youth: 10 Myths about the Next Generation by Michael Males, Common Courage Press, 1999

In an attempt to shatter the myth that, "Today's youth are America's worst generation ever," Michael Males leads the reader on a journey through chapters filled with facts and figures culled from the archives of government documents, foundation reports, and excerpts and figures from the research literature. The result is a rambling, often repetitive, but well supported thesis that today's teens are no worse than those in previous generations. Males takes exception to blaming teens for excessive drinking, violent crimes, poor driving, and apathy, and supports his argument by drawing comparisons to adolescents of the past who tested legal and social limits yet became responsible adults. The author also carefully documents how teens are perceived by law enforcement, insurance companies, educators, politicians, and the media.

If there is a fault with the book, it is that Males minimizes the risks teenagers face and the destructive behaviors that are by and large preventable. The reader longs for help to guide us toward the future, but little is offered. Males does, however, enable the reader to reflect on how an entire generation has been blamed for being unruly, self-interested, and drug seeking. It is this generation about which he writes that will soon take charge of our destiny.

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